TOPIC 1 PRACTICE TEST

1. Evaluate
$$4x^2 + 2y^2 - y$$
 when $x = 3$ and $y = -3$

2. Evaluate
$$-5x^3 \div \frac{1}{4}x - 2$$
 when x = 2

3. Solve for n:
$$-3(2-4n) - (n+5) = 2(1-2n)$$

4. Solve for a:
$$\frac{1}{3}a + \frac{2}{5}a = 3$$

5. Solve for x:
$$\frac{3}{8}x + \frac{4}{5} = \frac{3}{4} - \frac{1}{2}x$$

6. Solve for x:
$$\frac{3}{4}x - 6 = y$$

7. Solve for n:
$$5n + m^2n = 8$$

8. Solve for x:
$$3 - 2|x - 1| = -7$$

9. Solve and graph: 5x - 4 < 3x + 8

10. Solve and graph: $-\frac{1}{2}x - 1 \ge 2$

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11. Solve and graph: $-3 \le 2x + 4 < 8$

12. Solve and graph: 2(3x + 6) ≤ 32 + 2x ≤ -5x + 11



13. Solve for x: |1-2x| > 7

14. Solve for x:
$$\frac{|2x-8|}{4} - 1 < 3$$

15. Solve for x: $|5x + 2| + 3x \le 0$

16. Solve for x: $\left| \frac{2x+1}{5} \right| < 3$